Three new species of Ptininae (Coleoptera: Bostrichoidea: Ptinidae) from Eocene Baltic amber

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Abstract. The following three new species from Eocene Baltic amber are described and illustrated: *Ptinus* (*Gynopterus*) *electron* sp. nov., *Ptinus* (*Gynopterus*) *fantii* sp. nov. and *Ptinus* (*Gynopterus*) *groehni* sp. nov. Three other species are recorded: *Ptinus* (*Gynopterus*) *balticus* Bellés & Vitali, 2007 (Poland), *Ptinus* (*Gynopterus*) *burukovskyi* Alekseev, 2014 (Russia), *Ptinus* (*Gynopterus*) *scalovicus* Alekseev, 2014 (Russia) and *Sucinoptinus sucini* Bellés & Vitali, 2007 (Russia).

INTRODUCTION

The family Ptinidae, subfamily Ptininae, tribe Ptinini from Eocene Baltic amber was recently studied and new articles were published (Alekseev 2012, 2014, Bellés & Perkovsky 2016, Bellés & Vitali 2007, Bukejs et al. 2018, Alekseev, Bukejs & Bellés 2019). The subfamily contains 10 species from Baltic and Rovno ambers. The present contribution summarizes material of ambers inclusions with Ptinini from collection of Carsten Gröhn (Germany) and offers descriptions of three new species.

The article follows preceding articles dealing with Ptinidae, recently published by the present authors (Zahradník & Háva 2014, 2017 and Háva & Zahradník 2019).

MATERIAL AND METHODS

Species described here were compared with other species from Baltic amber or with data in descriptions. The type material of the newly described species are deposited in the following collections:

GPIH Geologische-Palaentologische Institut of University Hamburg, Germany (coll. Carsten Gröhn);

JHAC Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic.

The following measurements were made:

Total length (TL) - linear distance from head to apex of elytra.

Elytral width (EW) - maximum linear transverse distance.

Specimens of the presently described species are provided with a red, printed label with the text as follows: "HOLOTYPE (or PARATYPE, respectively) *species name* sp. nov. J. Háva & Petr Zahradník det. 2019".

RESULTS

Family Ptinidae Subfamily Ptininae

Ptinus (Gynopterus) balticus Bellés & Vitali, 2007

Material examined: 1 spec.: amber inclusion from Baltic amber, Gdansk city area, village called Sztutowo, Poland, bought from amber traders 4242, Artur Michalski, (JHAC).

Remarks. Species described from Russia: Kaliningrad, new to Poland.

Ptinus (Gynopterus) fantii sp. nov. (Figs. 1-3)

Type material. Holotype (\diamondsuit): amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C4053, (GPIH). Paratypes: (4 spec., not sexed): the same data but C8022 (JHAC); C8007, C 573, C1311, (GPIH).

Description. Body: TL 2.8 mm, EW 1.6 mm, subparallel-sided, integument uniformly piceous, tarsi dark brown (Figs. 1-2).

Head: antennal insertions close to each other, interantennal space narrow and flat, eyes hemispherical, prominent, finely facetted, ommatidial setae absent, antennae 11-segmented, comparatively long (Fig. 3).

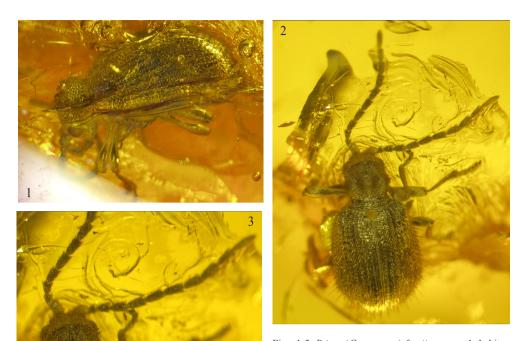
Pronotum (Fig. 3): short and broad with four bumps covered by brown setation.

Scutellum: large, subtriangular, rounded apically, covered by dense and very short accumbent yellowish setation.

Elytra: subparallel in basal part, ovate behind, widest in the middle, 1.1 times as long as wide, humeri with long, narrow bump, surface shining, with fine punctures arranged in regular striae, strial punctures large, round and shallow, regularly spaced, distances between punctures equal to two lengths of each puncture, setation sparse, formed by rows of semierect hairs on intervals and by accumbent hairs in strial punctures.

Abdomen: all five abdominal ventrites delimited, with suture lines well apparent, surface smooth, covered with short, thin and pale hairs.

Legs: tarsal formula 5-5-5, legs relatively robust, trochanter short, its apex not reaching elytral margin, tarsi with broad and equal in length tarsomeres I-IV, penultimate tarsomere not lobed, ultimate tarsomere longer than each of previous, claws simple, long and equal in length.



Figs. 1-3. *Ptinus* (*Gynopterus*) *fantii* sp. nov.: 1- habitus of holotype, lateral aspect; 2- habitus of paratype, dorsal aspect; 3- pronotal bumps and antenna.

Differential diagnosis. The new species differs from the known fossil amber species by the four bumps on pronotum and structure of antennae.

Etymology. Dedicated to colleague Fabrizio Fanti (Piazze, Italy) well known specialist in fossil Cantharidae (Coleoptera).

Ptinus (Gynopterus) burukovskyi Alekseev, 2014

Material examined: 2 spec.: amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C4469; C7808 (GPIH, JHAC).

Ptinus (Gynopterus) electron sp. nov. (Figs. 4-6)

Type material. Holotype (not sexed): amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C4587, (GPIH).

Description. Body: TL 3.1 mm, EW 1.5 mm, subparallel-sided, integument uniformly piceous, tarsi dark brown (Figs. 4-6).

Head: antennal insertions close to each other, interantennal space narrow and flat, eyes hemispherical, prominent, finely facetted, ommatidial setae absent, antennae 11-segmented, comparatively long (Fig. 5).

Pronotum (Fig. 4): short and broad with four, small bumps covered by light brown setation.

Scutellum: large, subtriangular, rounded apically, covered by dense and very short accumbent yellowish setation.

Elytra: subparallel in basal part, ovate behind, widest at the middle, long as wide, humeri with long, narrow bump, surface shining, with fine punctures arranged in regular striae, strial punctures large, round and shallow, regularly spaced, distances between punctures equal to two lengths of each puncture, setation sparse, formed by rows of semierect hairs on intervals and by accumbent hairs on strial punctures.

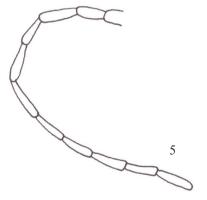
Abdomen: not visible.

Legs: tarsal formula 5-5-5, legs relatively robust and long, trochanter short, its apex not reaching elytral margin, tarsi with broad and equal in length tarsomeres I-IV, penultimate tarsomere not lobed, ultimate tarsomere longer than each of previous, claws simple, long and equal in length.



Figs. 4-6. *Ptinus* (*Gynopterus*) *electron* sp. nov.: 4- habitus, dorsal aspect; 5- antenna; 6- habitus, lateral aspect.





Differential diagnosis. The new species is similar to *Ptinus* (*Gynopterus*) *fantii* sp. nov. but differs from it by the long antennomeres and small pronotal bumps.

Etymology. Named after the Latin word electron (electrum).

Ptinus (Gynopterus) groehni sp. nov. (Figs. 7-8)

Type material. Holotype (\mathfrak{P}): amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C1048, (GPIH) [inclusion included a moth specimen].

Description. Body: TL 2.5 mm, EW 1.3 mm, subparallel-sided, integument uniformly piceous, tarsi dark brown (Figs. 7).

Head: antennal insertions close to each other, interantennal space narrow and flat, eyes hemispherical, prominent, finely facetted, ommatidial setae absent, antennae 11-segmented, comparatively short (Fig. 8).

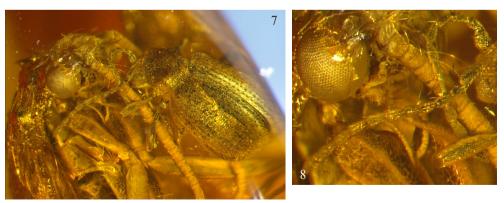
Pronotum (Fig. 7): black, short and broad with four, small bumps covered by dark brown setation.

Scutellum: large, subtriangular, rounded apically, covered by short accumbent black setation.

Elytra: subparallel in basal part, ovate behind, widest at the middle, as long as wide, humeri with small, narrow bump, surface shining, with fine punctures arranged in regular striae, strial punctures large, round and shallow, regularly spaced, distances between punctures equal to two lengths of each puncture, setation sparse, formed by rows of semierect hairs on intervals and by accumbent hairs on strial punctures.

Abdomen: not visible.

Legs: tarsal formula 5-5-5, legs relatively robust and long, trochanter short, its apex not reaching elytral margin, tarsi with broad and equal in length tarsomeres I–IV, penultimate tarsomere not lobed, ultimate tarsomere longer than each of previous, claws simple, long and equal in length.



Figs. 7-8. Ptinus (Gynopterus) groehni sp. nov.: 7- habitus, dorsal aspect; 8- antenna.

Differential diagnosis. The new species is similar to *Ptinus* (*Gynopterus*) *fantii* sp. nov. and *Ptinus* (*Gynopterus*) *electron* sp. nov. but differs from them by the structure of antennae and black pronotum.

Etymology. Dedicated to our friend and amber specialist Carten Gröhn (Glinde, Germany).

Ptinus (Gynopterus) scalovicus Alekseev, 2014

Material examined: 2 spec.: amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C1044; C7743 (GPIH, JHAC).

Sucinoptinus sucini Bellés & Vitali, 2007

Material examined: 1 spec.: amber inclusion from Baltic amber, Jantarnyj, Sambia, Kaliningrad Region, Russia, bought from amber traders C913, (CGPC).

Remarks. Species described from Poland, new for Russia.

LIST OF SUBFAMILY PTININAE SPECIES KNOWN FROM BALTIC AND ROVNO AMBERS

BA - Baltic amber

RA - Rovno amber

Dignomus francescovitalii Bukejs, Bellés & Alekseev, 2018	BA	Russia
Dignoptinus regiomontanus (Alekseev, 2014)	BA	Russia
Ptinus (Gynopterus) anastasiae Alekseev, 2014	BA	Russia
Ptinus (Gynopterus) balticus Bellés & Vitali, 2007	BA	Poland, Russia
Ptinus (Gynopterus) burukovskyi Alekseev, 2014	BA	Russia
Ptinus (Gynopterus) electron sp. nov.	BA	Russia
Ptinus (Gynopterus) fantii sp. nov.	BA	Russia
Ptinus (Gynopterus) groehni sp. nov.	BA	Russia
Ptinus (Gynopterus) scalovicus Alekseev, 2014	BA	Russia
Sucinoptinus brevipennis Bellés & Perkovsky, 2016	RA	Ukraine
Sucinoptinus bukejsi Alekseev, 2012	BA	Russia
Sucinoptinus rovnoensis Bellés & Perkovsky, 2016	RA	Ukraine
Sucinoptinus sucini Bellés & Vitali, 2007	BA	Poland, Russia

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